**How to Use A Microscope**

Microscopes are instruments that allow you to see things that are very small. The usefulness of a microscope is dependent on the condition and quality of the lenses used to make the eyepiece and the objectives. When using a microscope it is important to follow certain procedures to insure the lenses do not get damaged.

**Carrying and storing the microscope**

        Carry it with two hands—one hand under the base and the other hand holding the arm of the microscope.

**Using the microscope**

        Plug the electric cord into an outlet.

        Be sure the cord is in a safe position—not near any sources of heat or flame and where it cannot accidentally become entangled or pulled.

        Turn on the light.

**Focusing the microscope**

        Use the low power or 10x objective first.

        Focus by slowly turning the coarse adjustment knob.

        Adjust the focus by slowly turning the fine adjustment knob.

        Adjust the amount of light by moving the diaphragm or the condenser.

        Center what you want to look at in the field of view.

        Turn the nosepiece to use the next higher power objective, usually 40x.

        Focus using only the fine adjustment—the object should quickly come into focus with very little adjustment.

        Adjust the amount of light, if necessary, using the diaphragm.

        Center what you want to look at in the field of view.

**Using oil immersion**

        Follow all the preceding steps so the specimen is in focus with the 40x objective.

        Turn the nosepiece so the 40x objective is no longer over the specimen and the 100x objective is not yet in place.

        Place one drop of oil onto the slide—oil should be placed where the 100x objective will be, once it is locked into position.

        Turn the nosepiece slowly to bring the 100x objective into position.

        Watch as the objective moves into position to insure it does not hit the slide and that it contacts the drop of oil.

        Focus using the fine adjustment.

        Adjust the amount of light, if necessary, using the diaphragm.